

REMARKS/ARGUMENTS

This is in response to the Office Action mailed December 9, 2008. Applicant amends claims 1, 24, 31, and 35. No new matter is added by amendment. Claims 1-15, and 17-38 are pending in the application and presented for further examination and allowance.

Claims 34-38 were allowed. Applicant thanks the Examiner for indicating allowable subject matter.

Discussion of Rejections Under 35 U.S.C. §112

Claims 15 and 17-23 were rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. In particular, the Examiner rejects claim 15 for featuring “employing measured parameters of the first of the plurality of signals to perform...evaluate a validity of the obtained acquisition assistance data or calculate...updated acquisition assistance data.” The Examiner contends that the specification fails to sufficiently disclose the claimed feature. Applicant respectfully traverses the rejection and requests reconsideration and withdrawal of the rejection under 35 U.S.C. §112, first paragraph.

Claim 15 recites a method of acquiring a signal. The method includes “acquiring a first of the plurality of signals at the receiver.” Applicant’s Specification, describes an example of such signal acquisition, at page 14, paragraph [00047], describing acquisition of a single SV measurement.

The method of claim 15 further includes the feature of “employing measured parameters of the first of the plurality of signals.” Applicant’s Specification expressly provides, as an example of a measured parameter, MS clock bias. Applicant’s Specification states: “A good approximation of the MS clock bias may be reached after taking a single SV measurement.” *Applicant’s Specification*, at paragraph [00048].

The method of claim 15 further includes using the measured parameter for at least one of: “evaluate a validity of the obtained acquisition assistance data” or “calculate...updated acquisition assistance data.”

The first of the claimed features, namely “evaluate a validity of the obtained acquisition assistance data,” is described in Applicant’s Specification, for example at paragraph [00040]. Applicant’s Specification describes determining whether previous values of MS clock offset (bias) are valid in order to determine, for example, if a prior search

window size, W , is accurate. *See, Applicant's Specification*, at paragraph [00040]. Thus, Applicant's Specification describes using a measured parameter to evaluate validity of obtained acquisition assistance data.

The second of the claimed features, namely "calculate...updated acquisition assistance data," is described at Applicant's Specification at paragraph [00047]. The cited paragraph describes "progressively tightening search windows for as-yet unacquired signals on the basis of measurements of one or more signals that have already been acquired." *Applicant's Specification*, at paragraph [00047]. Applicant's Specification provides, as an example, using MS clock bias based on a single SV measurement to "reduce the MS clock uncertainty component of a code phase estimate or uncertainty window." *Applicant's Specification*, at paragraph [00052]. Thus, Applicant's Specification expressly describes using a measured parameter to "calculate...updated acquisition assistance data."

Claims 17-23 are as originally presented, and thus, are expressly supported in the application, as filed, at least by virtue of their original presentation in the application.

Applicant respectfully believes that all claimed features are described in Applicant's Specification, as filed, and thus believes that the requirements of 35 U.S.C. §112, first paragraph, are satisfied.

Applicant respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. §112, first paragraph, of claims 15 and 17-23.

Discussion of Rejections Under 35 U.S.C. §102

Claims 24, 26, 31, and 33 were rejected under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent No. 5,666,122 to Carter (hereinafter Carter). Applicant amends claim 24 and respectfully requests reconsideration and allowance of claims 24, 26, 31, and 33.

In order for a claim to be anticipated, a single prior art reference must describe, either expressly or inherently, each and every element as set forth in the claim. Applicant contends that Carter fails to describe every claimed feature of the claims, as amended.

Claim 24 recites a method of acquiring a signal at a mobile station. The method includes "obtaining first acquisition assistance data at the mobile station from a base station of a wireless communication system while the mobile station is at a first location." Carter fails to describe this claimed feature.

The Examiner cites to Carter, at Figure 2 in combination with the text at Col. 3, ll. 27+ as describing this claimed feature. In particular, the Examiner contends that Carter's description of storing ephemeris data in memory as well as a spatial position and turn-off time describes the claimed feature. *See, Office Action*, at page 6.

Claim 24 recites that the acquisition assistance data is received from a base station of a wireless communication system. Carter does not describe any acquisition assistance data received from a base station. Indeed, Carter describes a satellite communication system, and does not describe the mobile station communicating with any base station.

Carter does not describe the ephemeris data as being received at the mobile station from a base station. Conventionally, the ephemeris data is derived directly from the satellite signals. Carter does not describe alternatives for receiving the ephemeris data, and does not describe the data as having come from a base station.

Similarly, Carter does not describe the spatial position of the mobile station as coming from a base station. Instead, Carter describes that "The radiotelephone's position is determined by triangulation with different satellites or a single satellite in different positions over time." *Carter*, at Col. 3, ll. 16-18.

The time of turn-off is not conducive to being received from a base station, as the mobile station will be turned off, and incapable of receiving the signals from the base station.

Therefore, Carter does not describe the first claimed feature from claim 24.

Claim 24 also features "compensating the first acquisition assistance data at the mobile station for a new location of the mobile station." Carter fails to describe this claimed feature.

As discussed above, the "acquisition assistance data" refers to the acquisition assistance data received from the base station. Because Carter does not describe the first claimed feature, Carter cannot describe the associated feature of "compensating the first acquisition assistance data at the mobile station for a new location of the mobile station."

Therefore, Carter does not describe the second claimed feature and Carter does not anticipate claim 24.

Claims 26, 31, and 33 depend, either directly or indirectly from claim 24 and are believed to be allowable at least for the reason that they depend from an allowable base claim. Claim 31 was amended to depend from claim 30, to provide proper antecedent basis for the term "the predetermined quantity of time."

Discussion of Rejections Under 35 U.S.C. §103

Claims 1-15 and 17-33 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,937,865 to Bloebaum et al. (hereinafter Bloebaum) in view of U.S. Patent No. 6,211,819 to King et al. (hereinafter King).

Claim 1 recites a method of acquiring a signal. The method includes “evaluating a validity of the previously obtained acquisition assistance data for use in acquiring the particular signal, wherein evaluating the validity is based at least in part on a mobile station clock frequency error.” The claimed feature is described in Applicant’s Specification, for example, at paragraph [00040].

Neither Bloebaum nor King teach or suggest this claimed feature. Thus, a *prima facie* case of obviousness cannot be maintained based on Bloebaum and King. Applicant respectfully requests reconsideration and allowance of claim 1.

Bloebaum describes evaluating the freshness of almanac and ephemeris data stored in memory. *See, for example, Bloebaum*, Figure 5, block 308, and Figure 6, block 410. However, Bloebaum fails to teach or suggest that the validity is related in any way to the mobile station clock frequency error, as claimed.

Instead, Bloebaum teaches “Mobile terminal 100 then evaluates the freshness of the information in the almanac or ephemeris that has been accessed (block 308). Evaluating a time stamp and comparing it to a certain threshold may do this. In particular, ephemeris information is typically valid for approximately four hours. Thus, if the time stamp is less than four hours old, the ephemeris may be considered fresh. It is certainly possible to create other tolerances of freshness as needed or desired.” *Bloebaum*, at Col. 8, line 65 through Col. 9, line 6.

Bloebaum describes a similar manner of determining freshness in relation to the flowchart of Figure 6. Bloebaum states “Mobile terminal 100 then evaluates the freshness of the information in the almanac or ephemeris that has been accessed (block 410). Evaluating a time stamp and comparing it to a certain threshold may do this. In particular, ephemeris information is typically valid for approximately four hours. Thus, if the time stamp is less than four hours old, the ephemeris may be considered fresh. It is certainly possible to create other tolerances of freshness as needed or desired.” *Bloebaum*, at Col. 10, ll. 25-28. Again, Bloebaum fails to relate any evaluation of validity to a mobile station clock frequency error.

Even if we assume that almanac and ephemeris data is described as acquisition assistance data, Bloebaum fails to teach or suggest that mobile station frequency error is related to evaluating validity of almanac or ephemeris data.

King fails to cure the deficiencies in Bloebaum. King fails to teach or suggest any manner of evaluating validity of acquisition assistance data. The combination of King with Bloebaum fails to cure the deficiency in Bloebaum alone, where neither reference teaches or suggests the claimed manner of evaluating validity of acquisition assistance data.

Applicant respectfully requests reconsideration and allowance of claim 1 in light of the amendment to claim 1.

Claim 15 recites a method of acquiring a signal. The method includes “employing measured parameters of the first of the plurality of signals to perform at least one of evaluate a validity of the obtained acquisition assistance data or calculate, based on the obtained acquisition assistance data, updated acquisition assistance data for a second of the plurality of signals.” The combination of Bloebaum with King fails to teach or suggest this claimed feature.

The quoted feature from claim 15 describes, essentially, using measured parameters from a first acquired signal to perform at least one of a) evaluate validity of obtained acquisition data or b) calculate updated acquisition assistance data.

The portion from Bloebaum cited to and relied upon by the Examiner, Bloebaum, Col. 9, lines 28+, describes updating ephemeris data at the mobile station. Contrary to what is contended in the Office Action, at page 3, Bloebaum does not describe updating the acquisition assistance data based on received signal information.

Bloebaum fails to teach or suggest that measured parameters from a first acquired signal are used to evaluate validity of acquisition assistance data. Instead, as discussed above, Bloebaum teaches evaluating freshness of almanac and ephemeris data based on determining whether the four hours that the information is valid over has elapsed. Bloebaum fails to teach or suggest any relationship between a first measured parameter and validity of acquisition assistance data.

Additionally, Bloebaum fails to teach or suggest any manner of employing first measured parameters to calculate updated acquisition assistance data. Indeed, the Examiner merely bases the rejection on updating acquisition assistance data described in Bloebaum. However, this is not what is claimed. The relevant portion of the claim features “employing

measured parameters of the first of the plurality of signals to...calculate, based on the obtained acquisition assistance data, updated acquisition assistance data for a second of the plurality of signals.” Thus, as claimed, the updated acquisition data is based on the obtained acquisition assistance data. Further more, the updated acquisition assistance data is calculated by employing the measured parameters.

Neither Bloebaum nor King teaches or suggests any manner of calculating updated acquisition assistance data based on previously obtained acquisition assistance data. As conceded by the Examiner, Bloebaum merely describes obtaining new acquisition assistance data. Bloebaum fails to teach or suggest any manner of calculating update acquisition assistance data based on obtained acquisition assistance data. Bloebaum also fails to teach or suggest any manner of employing measured parameters to calculate acquisition assistance data.

King fails to teach or suggest any relationship between measured parameters and validity of acquisition assistance data or calculating acquisition assistance data, and thus, the combination of King with Bloebaum fails to cure the deficiencies in Bloebaum.

Applicant respectfully requests reconsideration and allowance of claim 15.

Claim 24 recites a method of acquiring a signal at a mobile station. Claim 24 features “compensating the first acquisition assistance data at the mobile station for a new location of the mobile station.” Neither Bloebaum nor King, whether alone or in combination, teach or suggest this claimed feature.

As discussed above, Bloebaum only describes determining freshness of almanac or ephemeris data based on determining whether the four hour window over which the information is valid has expired. *See, generally, Bloebaum*, at Col. 8, line 65 through Col. 9, line 6, and Col. 10, ll. 25-28.

Bloebaum does not teach or suggest any manner of “compensating the first acquisition assistance data at the mobile station for a new location of the mobile station,” as claimed. Bloebaum fails to relate acquisition assistance data with location, and fails to teach or suggest any manner of “compensating the first acquisition assistance data.” At most, Bloebaum describes replacing the acquisition assistance data when a predetermined 4 hour period of validity has expired.

King fails to describe compensating acquisition assistance data for a new location of the mobile station. Instead, King describes “the satellite position curve fit data and clock

correction data is transmitted from the base station 302 at predetermined intervals.” *King*, at Col. 4, ll. 29-31. Thus, *King* also fails to teach or suggest a relationship between mobile station location and “compensating the first acquisition assistance data.” As with *Bloebaum*, *King* teaches and suggests using time as the basis for sending completely updated data, and does not teach or suggest any manner of “compensating the first acquisition assistance data.”

The cited references, *Bloebaum* and *King*, whether alone or in combination, fail to teach or suggest every feature of claim 24. Thus, a *prima facie* case of obviousness is not established for the rejection of claim 24. Applicant respectfully requests reconsideration and allowance of claim 24.

Claims 2-14, 17-23, and 25-33 depend, either directly or indirectly, from one of claims 1, 15, or 24 and are believed to be allowable at least for the reason that they depend from an allowable base claim. Applicant respectfully requests reconsideration and allowance of claims 2-14, 17-23, and 25-33.

Discussion of Second Rejections Under 35 U.S.C. §103

Claims 1-15 and 17-33 were also rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,856,282 to Mauro et al. (hereinafter Mauro) in view of U.S. Patent No. 6,373,431 to Nakajima (hereinafter Nakajima) and U.S. Patent No. 6,757,610 to Mann et al. (hereinafter Mann).

Mauro is not a prior art reference for the purposes of a rejection under 35 U.S.C. §103(a). Mauro is disqualified as prior art against the claimed invention as provided in 35 U.S.C. §103(c)(1). Mauro is not available as a prior art reference under 35 U.S.C. §103(a), because Mauro (6,856,282) and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Mauro is disqualified as prior art under 35 U.S.C. §103(c). Mauro was assigned to QUALCOMM INCORPORATED in an assignment recorded on October 29, 2002 with the USPTO at reel 013472 and frame 0108.

The invention of the instant application was subject to an obligation of assignment to the same assignee, and was assigned to QUALCOMM INCORPORATED in an assignment recorded April 12, 2007 with the USPTO at reel 019154 and frame 0180.

STATEMENT OF COMMON OWNERSHIP

U.S. Patent Application No. 10/554,629 (the instant application) and U.S. Patent No. 6,856,282 to Mauro, et al. were, at the time the invention of the instant application was made, owned by Qualcomm Incorporated, or subject to an obligation of assignment to Qualcomm Incorporated.

Applicant respectfully requests reconsideration and withdrawal of the rejections to claims 1-15 and 17-33 under 35 U.S.C. §103(a) over Mauro, Nakajima, and Mann in light of the disqualification of Mauro as a prior art reference.

CONCLUSION

Applicant believes that all claims pending in the application are allowable. Applicant therefore respectfully requests that a timely Notice of Allowance be issued in this case.

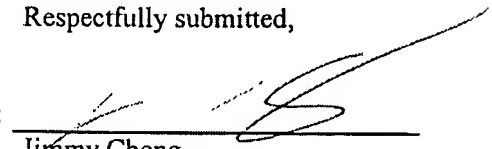
Applicant believes that the instant response is filed within the Shortened Statutory Period for response provided in the Office Action of December 9, 2008.

If there are any other fees due in connection with the filing of the response, please charge the fees to our Deposit Account No. 17-0026. If a fee is required for an extension of time under 37 CFR 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned.

Respectfully submitted,

Dated: March 09, 2009

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